Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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November 22, 2016

Massachusetts Mill III LP
31 Saint James Ave.
Boston, MA 02116-0000

RE: Lowell
169.2 Bridge Street
RTNs: 3-0033101, 3-0033793
3-0033853

Attention: Joseph Mullins

Immediate Response Action Conditional Approval; M.G.L. c. 21E & 310 CMR 40.0000

Dear Mr. Mullins:

On November 2, 2016 the Massachusetts Department of Environmental Protection (MassDEP) received a combined Immediate Response Action (IRA) Plan and Modified IRA Plan from you for approval pursuant to 310 CMR 40.0420 of the Massachusetts Contingency Plan (MCP). The combined document was submitted to address multiple environmental conditions identified on the site during the course of redevelopment activities, including the presence of free phase petroleum in groundwater [Release Tracking Number (RTN) 3-0033101], polychlorinated biphenyls (PCBs), heavy metals and pesticides in soil (RTN 3-0033474), asbestos in soil (RTN 3-0033853) and a petroleum sheen in the adjacent Concord River (RTN 3-0033793). The IRA Plan and Modified Plan were developed by Brian Butler, a Licensed Site Professional (LSP# 5736) with Goldman Environmental Consultants Inc. The purpose of this correspondence is to: (a) inform you that the proposed Immediate Response Action has been conditionally approved pursuant to 310 CMR 40.0420 and (b) specify the conditions under which this IRA Plan is granted approval.

Immediate Response Actions are a class of remedial actions taken in an expeditious manner to address sudden releases, Imminent Hazards and other time-critical releases or site conditions. IRAs are taken when timely actions are required to assess, eliminate, abate or mitigate adverse site conditions.

Immediate Response Action

The IRA Plan, as prepared by Mr. Butler, requests approval of the following actions:

1) Reuse of contaminated soils containing metals, PCBs and asbestos previously excavated under RTN 3-0033101 to fill a utility vault along the Northwestern edge of the Picker Building on site. As part of the reuse strategy, a 4 foot wide clean utility corridor will be placed around the existing sewer line to protect future utility workers. An estimated 125 cubic yards (yd^3) will be placed as part of the reuse.

2) Excavate the top asbestos/PCB containing soils from the eastern portion of the courtyard. Soils will be removed in 1 foot lifts and 5 point composite samples collected to confirm all asbestos-containing soils are removed from the courtyard areas. Should the results indicate asbestos is still present, the above procedure will be repeated until no further asbestos is identified. All removed soils will be stockpiled on property and properly covered for future reuse. It is estimated that up to 2,000 yd^3 may be stockpiled.

3) During the excavation of contaminated soils on site, dust and asbestos monitoring will be conducted using 2 real time monitors. Dust monitoring limits proposed are 180 micrograms per cubic meter ($\mu g/m^3$) in areas with elevated PCBs, and 300 $\mu g/m^3$ in all other areas.

4) Petroleum-contaminated soils (based on visual evidence) excavated in the eastern portion of the courtyard will be disposed offsite. Soils will be removed in the area of the former fuel oil bunker to the water table. If additional soils below the water table can be removed, dewatering will occur to allow the removal of those soils. Up to 2,000 gallons of water may be collected in a frac tank for characterization and proper disposal, and approximately 2,000 yd^3 of soil may be removed for proper recycling/disposal. Post-excavation sampling for Extractable Petroleum Hydrocarbons with target compounds will be conducted to document conditions.

5) Dewater the caissons that were installed to control oil migration into the Concord River in order to apply Gunite to the wall to eliminate migration pathways. All water pumped from the caissons will be collected in a frac tank for testing and proper disposal.

6) Excavate soils from behind the retaining wall to its base (estimated to be 18-20 feet deep) and apply a similar Gunite spray to the inside wall or installation of a concrete/bentonite slurry wall to further reduce the likelihood of petroleum migration. If deemed necessary, a petroleum interceptor pipe and/or recovery wells will be installed prior to backfilling.

7) Excavation of soils across the remainder of the courtyard to a depth of 3 feet for deposition in the petroleum excavation area for reuse. As part of the reuse, a temporary road previously installed over contaminated soils will also be added to the contaminated soil repository. Finally, previously filled soil repositories (4 drywells, the utility vault & coal chute) will be dismantled to 3 feet below grade and any soils removed will be added to the repository in the eastern courtyard. The soil repositories will then be capped with concrete.

8) Placement of a marker barrier across the entire courtyard, to be followed by 3 feet of clean fill.

MassDEP's approval of the activities described above is contingent upon your adherence to the following conditions of approval, and to the provisions of all applicable MassDEP regulations governing response actions. Your initiation of the approved activities will constitute your understanding and acceptance of these conditions of approval.

I. Site Specific Conditions

1) Based on a review of the documents submitted to date, MassDEP has received no remedial proposal to address contaminants reported under RTN 3-0033474 (PCBs, heavy metals). Although these contaminants have been referenced under Modified IRA Plans for RTN 3-0033101, you are reminded that pursuant to 310 CMR 40.0404(2), all RPs and other persons conducting response actions must submit all required plans prior to initiating response actions. To this end, a Release Abatement Measure Plan must be submitted for RTN 3-0033474 prior to initiation of response actions that involve any contaminants for which that notification to MassDEP was provided.

2) All remedial work involving asbestos-contaminated soils shall not be conducted until the appropriate documents have been submitted to MassDEP's Bureau of Air and Waste (BAW) and approval is received pursuant to the provisions of 310 CMR 7.00. Should there be any discrepancy between response actions approved in this letter and those required by BAW, BAW's requirements are to be followed and any discrepancy(ies) noted in the next appropriate Status Report.

3) Based on a telephone call from LSP Butler on November 21, 2016, MassDEP understands that the sealing of the retaining wall from the river side will not be conducted due to water management issues. The sealing of the wall can reportedly be conducted from the inside, as proposed in Item 6 above under the existing approved Notice of Intent issued by the Lowell Conservation Commission. Prior to conducting the proposed sealing actions, a copy of the approved Notice of Intent must be submitted to the Bureau of Waste Site Cleanup to document all approvals are in order.

4) Notwithstanding the requirements of Item 1 above, no soil excavation containing detectable levels of PCBs may occur on site until a determination of TSCA applicability is received from the US EPA and transmitted to MassDEP. If The US EPA indicates some or all soils are subject to TSCA and requires assessment and/or remedial response actions that differ significantly from those proposed in this submittal, then a Modified IRA Plan for RTNs 3-0033101 and 3-0033853 must be submitted. Such document, if required, may be submitted concurrently with documentation required pursuant to Item 3 above.

5) The dust action levels proposed in Appendix F of the document are to be modified to a maximum of 150 ug/m^3 for all excavation work.

II. General Conditions

1) This response action must be performed in a manner and to a degree which ensures the protection of human health, safety, public welfare and the environment;

2) This response action must be conducted under the direct supervision of a competent professional with specific experience in site remediation/environmental engineering practices, using good engineering procedures and accepted construction practices, and must be managed, supervised, actually performed or periodically reviewed by a Licensed Site Professional;

3) The Immediate Response Action Plan must be conducted in compliance with all applicable public involvement provisions specified in 310 CMR 40.0428. You are specifically reminded of the obligation to provide the appropriate notification to both property owners and Affected Individuals, and copies of any sampling results to property owners pursuant to the requirements of 310 CMR 40.1403(10) and/or 40.1403(11), as applicable; and

4) Pursuant to 310 CMR 40.0427(1), this IRA will not be considered complete until all site conditions which give rise to the need for the Immediate Response Action, as described in 310 CMR 40.0412, have been assessed and, where necessary, remediated in a manner and to a degree that will assure, at a minimum, both: (a) the accomplishment of any necessary stabilization of site conditions; (b) the elimination or control of any Imminent Hazards to health, safety, public welfare and the environment, without the continued operation and maintenance of Active Remedial Systems or Active Exposure Pathway Mitigation Measures, or the incorporation of ongoing response actions to eliminate or control the Imminent Hazard into the Phase IV Remedy Implementation Plan for the disposal site; and (c) the completion of time-critical measures addressing the elimination, prevention or mitigation of Critical Exposure Pathways(s), as documented with an LSP Opinion.

III. Required Submittals

1) Pursuant to the provisions of 310 CMR 40.0425, an Immediate Response Action Status Report must be submitted to MassDEP within 120 days of the date you first communicated the need to conduct an IRA. Subsequent Immediate Response Action Status Reports must be submitted to MassDEP every 6 months thereafter for the duration of the IRA, or on an annual basis for actions that solely involve the use of Active Exposure Pathway Mitigation Measures for conditions that pose a Critical Exposure Pathway that does not pose an Imminent Hazard, provided the conditions of 310 CMR 40.0425(5) have been met.

2) For disposal sites where Active Operation and Maintenance of a remedial action is being conducted, a Remedial Monitoring Report shall be submitted on a schedule described in 310 CMR 40.0425(7).

3) Within 60 days of the date of completion, an Immediate Response Action Completion Statement and a completion report as specified in 310 CMR 40.0427 must be submitted to MassDEP.

If you have any questions relative to this matter, please contact Kyle MacAfee at the letterhead address or (978) 694-3393. All future communications regarding this release must reference the Release Tracking Numbers (RTNs 3-0033101, 3-0033793 & 3-0033853) contained in the subject block of this letter.

Sincerely,

Kyle MacAfee
Environmental Engineer
Risk Reduction

Iris W. Davis
Section Chief
Risk Reduction and Enforcement

cc: Mayor Edward Kennedy, City of Lowell, cgettings@lowellma.gov
Lowell Health Department, Kerrran Vigroux, Director, kvigroux@lowellma.gov
Kimberly Tisa, PCB Coordinator, US EPA, Tisa.Kimberly@epa.gov
Brian Butler, LSP-of-Record, bbutler@goldmanenvironmental.com
MassDEP Data Entry/File (IRA/APWRIT)